

Datasheet: MCA2681A647

Description:	RAT ANTI MOUSE ABCA1:Alexa Fluor® 647
Specificity:	ABCA1
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	5A1-1422
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/10

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Mouse		
Product Form	Purified IgG conjugated to Alexa Fluor® 647- liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)		
	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.05mg/ml		
Immunogen	ABCA1 transfected HeLa cells.		

External Database**Links****UniProt:**[P41233](#)[Related reagents](#)**Entrez Gene:**[11303](#)

Abca1

[Related reagents](#)

Synonyms

Abc1

RRID

AB_1604582

Specificity

Rat anti Mouse ABCA1 antibody, clone 5A1.1422 recognizes murine adenosine triphosphate (ATP) Binding cassette transporter 1 (ABCA1). The ABC transporters are a large family of conserved proteins that transport a wide variety of molecules across cellular membranes. ABCA1 is a member of the ABC-A sub-family, which acts as a lipid translocator. The molecule was originally identified as a scavenger receptor on macrophages and research shows that ABCA1 also plays a major role in cholesterol metabolism. ABCA1 may play an important role in protecting against cardiovascular disease.

Mutations in ABCA1 gene have been associated with [Tangier disease](#), a genetic disorder of lipid metabolism, and the more common [Familial HDL deficiency](#), presenting with many of the same symptoms.

Flow Cytometry

Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

References

1. Pradel, L.C. *et al.* (2009) ATP-binding cassette transporter hallmarks tissue macrophages and modulates cytokine-triggered polarization programs. [Eur J Immunol. 39 \(8\): 2270-80.](#)
2. Wang, Y. *et al.* (2019) Smooth Muscle Cells Contribute the Majority of Foam Cells in ApoE (Apolipoprotein E)-Deficient Mouse Atherosclerosis. [Arterioscler Thromb Vasc Biol. 39 \(5\): 876-87.](#)

Further Reading

1. Zarubica, A. *et al.* (2007) ABCA1, from pathology to membrane function. [Pflugers Arch. 453 \(5\): 569-79.](#)

Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Guarantee

12 months from date of despatch

Acknowledgements

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**Health And Safety
Information**

Material Safety Datasheet documentation #10041 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA2681A647>
10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA1212A647\)](#)

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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